months (Range 0–93), however a significant proportion ($n = 200$) are still alive at median 35 months post-operative (Range 2–125). Statistically significant survival differences were demonstrated with greater tumour number (solitary metastasis vs. multiple metastases [median 35months vs. 23months] $p = 0.0004$); increasing number of resections performed (single vs. repeat [median 34months vs. median 46months] $p < 0.0001$); and resection margins (R0 vs. R1 [median 34months vs. 22.5months] $p = 0.0002$). Neoadjuvant chemotherapy did not confer a significant survival benefit (no neoadjuvant vs. neoadjuvant (median 30months vs. 25.5months [$p = 0.1955$])

Conclusions: A wide spectrum of CRLM exists, often representing the life-limiting factor in those with colorectal cancer. We have demonstrated favourable outcomes in our cohort of patients with resectable disease; however the role of neoadjuvant therapy including newer biological agents remains controversial. Standardised treatment protocols may help improve outcomes and cost effectiveness.

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Parallel Session 3 – BJS Prize Papers: Tuesday 3rd November 2015, 08:00 to 09:00

13. Cavity biopsy and the assessment of marginal status following breast conserving surgery

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Introduction: Breast conserving surgery (BCS) has been shown to confer the same survival benefit as mastectomy. Following wide local excision, residual disease in the breast is linked with local recurrence, which has a negative effect on survival rates. The acceptable distance of disease from the excision margin is debated. Cavity biopsy (CB) has been suggested to identify residual disease.

Method: 1405 patients who underwent BCS under the care of the senior author over 24 years (1991–2015) were prospectively studied. Patients with tumours in any part of the breast were included, and axillary surgery was carried out as indicated. Demographic details, tumour histology, margin involvement, and result of cavity sampling were recorded. Margin clearance of ≥ 1 mm was deemed acceptable excision.

Results: Invasive disease was found in 86% of patients, 14% carcinoma in situ. The majority of patients (85%) had negative excision margins. In 214 (15%), excision margins showed residual disease. In 58 patients the resection margins were clear, but cavity biopsies positive, representing a 67% increase in the number of patients in whom further surgery was indicated.

Table 1

	<i>Cavity Positive</i>	<i>Cavity Negative</i>
<i>Margin Positive</i>	86 (6.1%)	128 (9.1%)
<i>Margin Negative</i>	58 (4.1%)	1133 (80.6%)

Conclusions: A clear margin does not guarantee absence of residual disease, which can be present some distance from the index tumour. Cavity biopsy identifies residual disease and influences treatment in 4.1% of patients undergoing BCS. We recommend the wider adoption of this technique.

<http://dx.doi.org/10.1016/j.ejso.2015.08.044>

14. Poor performance in Incremental shuttle walk and cardiopulmonary exercise testing predicts poor overall survival for patients undergoing oesophago-gastric resection

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Introduction: The assessment of cardiorespiratory fitness is recommended before major surgery to identify patients who may be at increased operative risk. Multidisciplinary assessment of patient fitness can also help decide the appropriateness of major oesophago-gastric resections. This study aimed to assess the correlation of cardiopulmonary exercise testing (CPET) and incremental shuttle walk test (ISWT) results with postoperative complications and long-term outcome.

Method: Seventy patients, who had surgical resection for oesophageal and gastric cancer in our hospital between 2010 and 2014, underwent preoperative assessment of their fitness, which included both ISWT and CPET. Data for postoperative complications and overall survival for these patients was recorded.

Results: Neither the ISWT result, anaerobic threshold (AT) nor VO2 Max correlated well with perioperative complications. However ISWT ($p = 0.002$), AT ($p = 0.006$) and VO2 Max ($p = 0.018$) all correlated strongly with overall survival. Patients with a ISWT result of less than 350 m had a median survival of 18 months compared with 51 months for those scoring 350 m or higher. No patient with a score of less than 350 m survived beyond 26 months. In a subset of patients with ISWT results both pre and post chemotherapy ($n = 37$), those that had a decline in result had a 40% incidence of post-operative respiratory complications compared to 26.7% and 8.3% respectively for those where the result did not change or improved, though due to small numbers this only approached significance ($p = 0.087$).

Conclusion: ISWT and CPET can be useful preoperative tools to predict overall survival for patients undergoing oesophago-gastric resection. The poor long-term outcomes for patients with an ISWT result of less than 350 m should be considered when deciding whether they should be treated on the surgical pathway. Furthermore patients with a decline in the functional status during chemotherapy seem to do worse than those where it is maintained or improved creating a case for exercise interventions during this period.

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15. The international nature of evidence and the influence this has on the formulation of clinical guideline recommendations for the management of colorectal cancer.

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Introduction: Confidence in a guideline recommendation might be lost if it is thought less applicable because of the international origin of the